

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 - 44. Cancelled.

45 (Currently Amended). A method of delivering a the transgene of claim 60 to a cell, said method comprising the step of contacting the cell with a the non-naturally occurring AAV according to claim 60, ~~wherein said rAAV comprises the transgene.~~

Claims 46 – 59. Cancelled.

60 (Currently Amended). A non-naturally occurring adeno-associated virus (AAV) comprising an AAV9 capsid which comprises AAV vp1, AAV vp2 and AAV vp3 capsid proteins, wherein at least one of said capsid proteins is an AAV9 capsid protein said capsid comprising a sequence selected from the group consisting of: ~~vp1 capsid protein,~~ amino acids (aa) 1 to 736, of SEQ ID NO:123; ~~vp2 capsid protein,~~ aa 138 to 736, of SEQ ID NO: 123 ; and ~~vp3 capsid protein,~~ aa 203 to 736, of SEQ ID NO: 123 , said AAV further comprising a minigene having AAV inverted terminal repeats and a transgene comprising a heterologous gene operably linked to regulatory sequences which direct its expression in a host cell.

61 (Currently Amended). The non-naturally occurring adeno-associated virus (AAV) according to claim 60, wherein the AAV9 capsid ~~protein~~ is encoded by a nucleic acid sequence selected from the group consisting of:

vp1, nucleotides (nt) 1 to 2211 of SEQ ID NO: 3;

vp2, nt 411 to 2211 of SEQ ID NO:3; and

vp 3, nt 609 to 2211 of SEQ ID NO:3;

~~wherein the nucleotides numbers are of AAV9, SEQ ID NO: 3.~~

62 (Previously Presented). A composition comprising the non-naturally occurring AAV according to claim 60 and a physiologically compatible carrier.

63 (Currently Amended). A method of delivering the a transgene to a cell, said method comprising the step of contacting the cell with the AAV according to claim 65, ~~wherein said minigene comprises the transgene.~~

64 (Currently Amended). The method according to claim 63, wherein the transgene encodes a protein is selected from the group consisting of: a low density lipoprotein (LDL) receptor, a high density lipoprotein (HDL) receptor, a very low density lipoprotein (VLDL) receptor and a scavenger receptor.

65 (Currently Amended). An adeno-associated virus (AAV) comprising an AAV9 capsid, wherein the AAV9 capsid comprises AAV vp1, AAV vp2 and AAV vp3 proteins; ~~wherein said proteins which~~ comprise an amino acid sequence is at least 95% identical to amino acids 203 to 736 of SEQ ID NO: 123 selected from the group consisting of SEQ ID NO: 121 and SEQ ID NO: 122, and wherein said AAV further comprises a minigene having AAV inverted terminal repeats and a transgene comprising a heterologous gene operably linked to regulatory

US Patent Application 10/573,600
Response to FOA dated July 9, 2010
October 12, 2010

sequences which direct its expression in an host cell, wherein said amino amino acid sequence is selected from the group consisting of SEQ ID NO: 121 and SEQ ID NO: 122.

Cancel claims 66 - 76.